

# Fitz - Hugh - Curtis

## A Diagnostic Utility of Fitz-Hugh-Curtis Syndrome by Using Contrast Enhanced Abdominopelvic Computerized Tomography

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**Purpose:** Fitz-Hugh-Curtis (FHC) syndrome is characterized by right upper quadrant pain due to perihepatitis with pelvic inflammatory disease (PID). It is diagnosed by using its typical symptoms, but final diagnosis is made by confirmation of the presence of laparoscopically visualized perihepatic violin string like adhesions. However, laparoscopy is difficult to perform in the emergency department. Recently, on computerized tomography (CT) a linear enhancement of the liver capsule was detected in a patient with FHC syndrome. We present a review of a series of 11 cases in female of FHC syndrome diagnosed by CT.

**Methods:** We reviewed the medical records and the CT findings of 11 cases of FHC syndrome diagnosed during 7 months in the emergency department. The clinico radiologic criteria of our hospital is as follows: First, right upper quadrant pain. Second, linear enhancement of the liver capsule in the contrast enhancement phase of CT. Third, no pathologic findings for the liver, the gallbladder and the biliary tract in CT.

**Results:** Eleven patients were diagnosed during 7 months by using criteria. The mean age was 30.2 (range: 16-46)

years. Seven patients had a history of PID within 6 months. Seven of the 9 patients who take a pelvic examination were positive in C. trachomatis PCR (polymerase chain reaction), and another patient had a positive N. gonorrhoeae cervix culture. One patient who showed negative in both the C. trachomatis PCR and the N. gonorrhoeae cervix culture had cultured E. coli in urine and blood culture.

**Conclusion:** CT makes easy the previously difficult diagnosis of FHC syndrome in female patients capable of pregnancy with right upper quadrant abdominal pain.

**Key Words:** Pelvic Inflammatory Disease, Chlamydia trachomatis, Helical CT.

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Fitz-Hugh-Curtis (FHC) 1920  
Carlos Stajano가 . Carlos Stajano<sup>1)</sup>  
Neisseria gonorrhoeae (N.  
gonorrhoeae)

1930  
Thomas Fitz-Hugh Arthur Curtis

FHC

FHC

( ) N. gonorrhoeae  
Chlamydia trachomatis (C. trachomatis)

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10 (91%) 2 1 N. gonorrhoeae가  
 , 1 Escherichia  
 coli (E. coli)가 (Table 3).  
 7  
 8 (73%) 9 , , , -  
 (82%) (Table 2). 8 4  
 7 -  
 7  
 가(>10,800/uL 2 ,  
 >73%) 7 (64%) AST/ALT 2  
 (Table 3). 9 (Fig. 1).  
 C. trachomatis .  
 7 , .

**Table 2.** Physical examination

Pt	RUQT	LAT	CVAT	CMT
1	+	+	Rt	-
2	+	-	Rt	-
3	+	+	Rt	+
4	+	+	Rt	+
5	+	+	Lt	+
6	+	+	-	*
7	+	+	Rt	-
8	+	+	-	+
9	+	-	Lt	*
10	+	-	Rt	-
11	+	+	Both	+

Pt: patient number, RUQT: tenderness on RUQ area, LAT: tenderness on lower abdomen,

CVAT: tenderness of costovertebral angle, CMT: Cervical motion tenderness, Rt: right, Lt: left

\*: Unchecked due to patient refusal of pelvic examination

**Table 3.** Blood test and culture

Pt	AST/ALT(IU/L)	WBC/ $\mu$ l(neutrophil%)	PCR*	Cervix culture
1	19/11	5,770 (62)	+	-
2	16/7	7,920 (66.7)	+	-
3	14/6	7,160 (77.9)	+	-
4	19/18	5,690 (69.2)	+	-
5	17/6	9,350 (76.8)	+	-
6	16/11	10,090 (77.6)	Unchecked <sup>†</sup>	Unchecked <sup>†</sup>
7	20/29	8,130 (79.6)	+	-
8	20/20	9,640 (57.7)	-	+
9	14/10	7,890 (82.4)	Unchecked <sup>†</sup>	Unchecked <sup>†</sup>
10	14/8	12,000 (79.3)	+	-
11	31/29	20,800 (92.1)	-	‡

Pt: patient number, AST: aspartate aminotransferase, ALT: alanine aminotransferase,

IU: international unit, WBC: white blood cell, PCR : polymerase chain reaction

PCR\*: C. trachomatis polymerase chain reaction from endocervical swab

Unchecked<sup>†</sup>: Unchecked due to patient refusal of pelvic examination

‡: Cervix culture was negative, but Escherichia Coli (E. Coli) was detected from urine and blood culture

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7 4 11

FHC

11 4 24 FHC

8

3 3 2 가 FHC C.

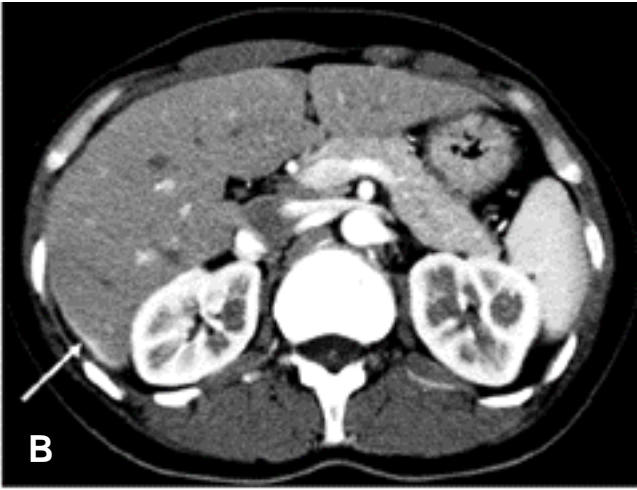
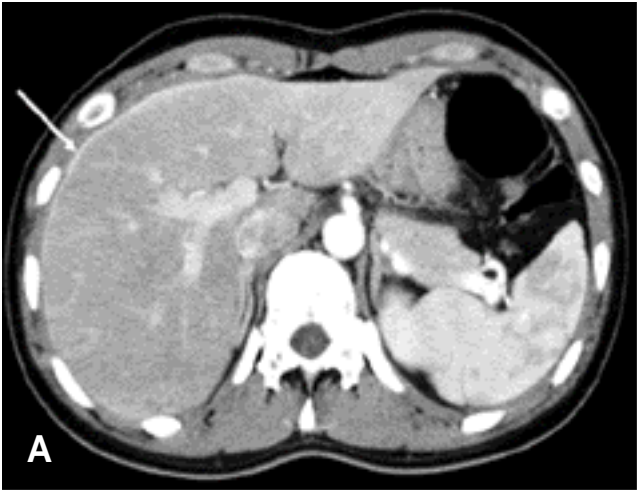
trachomatis , C. trachomatis 가

FHC 가 가 ,

6-8)

8)

C. trachomatis



**Fig. 1.** Abdominopelvic CT scan of the patients. All cases show enhancement of the liver capsule (white arrows). (A) has enhancement on anterior surface of both lobe. (B) has localized enhancement on posterolateral aspect of right lobe. (C) has enhancement on anterior surface of right lobe.

[illegible]

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